REMARKS/ARGUMENTS

Claims 17-24, 26, 27 and 34-40 are pending at this stage of prosecution. In addition to claim objections, various sets of claims are rejected under Sections 102, 103, and 112 of the Patent Statute. Applicant submits that the amendments and arguments presented herein should result in the allowance of some or all of these claims.

Claims 35-37 have been objected to under 37 CFR 1.75(c), as being of improper dependent form. It appears to be the Examiner's position that the claims in question fail to further limit the subject matter of the claim from which they depend, i.e., claim 34. The undersigned has reviewed the claims and understands the issues. It is believed that claims directed to using a core can be written as a sequential extension of claims directed to making the core. However, correction has been made to remove this issue from prosecution. Thus, claims 35 and 37 have been canceled (without prejudice), and effectively replaced with claim 41. The latter claim is directed to a process for making a turbine component, utilizing the core recited in other claims.

Claims 17-24, 26-27, and 34-40 have been rejected under 35 U.S.C. 112, first paragraph, for failing to comply with the enablement requirement. The issue continues to be related to the viscosity ranges recited in the specification, and the materials to which those ranges are directed. Applicant reiterates that, in some specific embodiments, the viscosity limitation (1 to 1,000 centistokes) is applicable to the ceramic slurry "as a whole". In other embodiments, the viscosity limitation also refers to the silicone monomers/oligomers, as recited in original claim 11, as well as paragraphs 25 and 38 of the specification. Thus, Applicant submits that the viscosity term can be applied in either context, and conveys a similar meaning in regard to

critical flow properties for the molding of cores. However, to eliminate issues in prosecution, the appropriate claims have been amended, to recite that the viscosity limitation refers to the composition of silicone monomers/oligomers.

The rejections of various sets of claims under 35 U.S.C. 102 remain, as outlined on page 3 of the Office Action. Many of these issues have also been discussed in detail during prosecution. The applied references are: U.S. Patent 4,269,753 ("Mine"); W. Atwell et al, U.S. 4,888,376 ("Atwell"); and Schilling, Jr. et al, U.S. Patent 5,162,480 ("Schilling"). With reference to the amended and new claims, Applicant submits that none of these references contains all of the key invention limitations. Primary examples of the required limitations include: silicone monomer/oligomer matrix components which must be of low viscosity; and which are characterized by high reactivity via alkenyl or hydride-functional groups. The use of such materials to form ceramic casting cores of pre-selected dimensions also represents another key limitation.

Moreover, in regard to another issue which remains unresolved, Applicant maintains that the shape of the core is a well-defined concept in the Application, and in the relevant art. Again, a core represents a shape (sometimes very complex) which defines the interior regions of the cast article. One of the newly-cited references, U.S. Patent 3,957,715 (Lirones et al), provides but one example of the need and function of cores (e.g., see column 1, lines 26-30; and column 5, line 57 to column 6, line 15). Therefore, it should be clear that cores have all of the patentable attributes of any other type of article. Claim 34 (step e) and new claim 41 (step d) include a recitation for core shape. This language is generally supported by the

specification and claims of the Application, and does not involve the insertion of new matter.

Claims 20, 35-37, and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over one or more of the references mentioned above, in addition to U.S. Patent 4,190,450 (Robb et al) and U.S. Patent 3,957,715 (Lirones et al). The issues regarding the currently-pending claims (i.e., after entry of this amendment) are similar to those for the specifically-rejected claims. As Applicant noted during previous prosecution, Mine has nothing to do with the end uses contemplated for the present invention, and is instead specifically related to wire coating compositions. Mine never suggests the highly functionalized, low viscosity silicone monomers/oligomers of the present invention. Atwell has nothing to do with investment casting cores, or the preparation of curable polymers, using starting materials with the high level of functionality recited in some of the pending claims. Moreover, the Schilling patent also fails to disclose monomers/oligomers with the high level of functionality required in the pending claims. While the reference may describe the use of polysiloxane materials for gas turbine blades (i.e., the parts being cast), it has nothing to do with ceramic cores, or methods for making them.

The Robb and Lirones patents have also been reviewed by Applicant. In view of the manner in which they are being applied in this instance, they can be discussed collectively. The patents clearly mention ceramic cores, and investment casting procedures which may employ such cores, in the preparation of turbine components requiring hollow regions. Applicant concedes that each of these general concepts and features are known in the art. However, the specialized preparation and

use of cores according to the pending claims is never suggested by Robb and Lirones, or by any combination of either patent with those discussed previously.

In conclusion, Applicant submits that the pending claims and new claims are patentable over the cited art. The undersigned continues to be very interested in discussing any remaining issues with the Examiner, if an interview might resolve those issues.

Please charge all applicable fees associated with the submittal of this Response and any other fees applicable to this application to the Assignee's Deposit Account No. 07-0868.

Respectfully submitted,

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